

CLAIMS

1. A semiconductor-device production method wherein,  
before a semiconductor chip having a plurality of bumps is  
mounted on a mount substrate having a plurality of bumps by  
5 flip chip bonding, projecting guides are formed on at least  
one of the semiconductor chip and the mount substrate so as  
to protrude near the bumps and from a surface on which the  
bumps are provided, and to have guide faces pointing toward  
the bumps.

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2. The semiconductor-device production method according  
to claim 1, wherein the guide faces of the projecting guides  
are inclined faces or curved faces disposed along oblique  
lines at an obtuse angle to the surface on which the bumps  
15 are provided.

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3. The semiconductor-device production method according  
to claim 1, wherein the projecting guides are provided near  
the bumps disposed at four corners on the outermost  
20 periphery of the semiconductor chip or the mount substrate.

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4. The semiconductor-device production method according  
to claim 1, wherein the projecting guides are made of a  
material that becomes harder than the bumps at a heating  
25 temperature during bump bonding.

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5. The semiconductor-device production method according to claim 1, wherein the projecting guides are provided near the bumps so as to be substantially L-shaped in plan view.

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6. The semiconductor-device production method according to claim 1, wherein the projecting guides are formed so that the height thereof is larger than the height of the bumps disposed near the projecting guides.

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7. The semiconductor-device production method according to claim 6, wherein the projecting guides are formed so that the height thereof is substantially equal to or smaller than a prescribed gap between the semiconductor chip and the mount substrate.

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8. A semiconductor device wherein a semiconductor chip having a plurality of bumps is mounted on a mount substrate having a plurality of bumps by flip chip bonding, and wherein projecting guides are provided on at least one of the semiconductor chip and the mount substrate so as to protrude near the bumps and from a surface on which the bumps are provided, and to have guide faces pointing toward the bumps.

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